



Y-12 BULLETIN

A NEWSPAPER BY AND FOR EMPLOYEES OF CARBIDE AND CARBON CHEMICALS CORPORATION IN Y-12

Volume 3, No. 27

OAK RIDGE, TENNESSEE

Tuesday, July 12, 1949

Carbide Puts Modern And Versatile Research Center Into Operation To Continue And Expand Basic Work

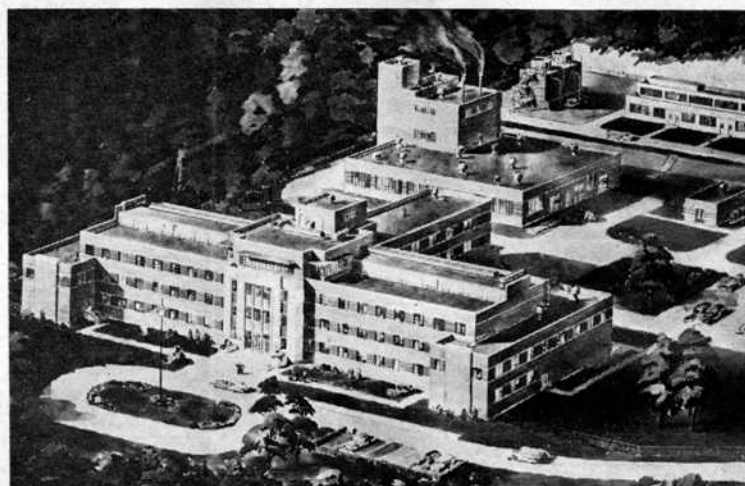
One of the most versatile and up-to-date chemical research centers in the world is just being put into operation by Carbide and Carbon Chemicals Corporation, according to Dr. G. O. Curme, Jr., vice-president of Carbide and Carbon Chemicals Corporation and vice-president—Chemicals Research, Union Carbide and Carbon Corporation. This new organic chemical research center is located on a 140-acre tract near the Company's South Charleston, W. Va., plant. Construction was begun in March, 1947. When finally completed, it will be the largest single laboratory project the Corporation has ever undertaken.

Built for the purpose of continuing and expanding the basic research work that, in the past, has given birth to such well-known chemical products as "Prestone" anti-freeze, "Vinylite" plastics, and "Profax" bottled gas, the new establishment is equipped according to the most recent developed requirements for chemical research. Ingenious supports in each laboratory permit versatility in the location of laboratory furniture and equipment, and each laboratory can draw on any one of 14 separate utilities from permanent outlets—including such unusual services as cold brine, oxygen, hydrogen, nitrogen, and steam at either 15 or 200 pounds per square inch.

At present only the main research building, devoted to basic research, is being occupied. Four other large development buildings are to be occupied in the future. The completed project eventually will house fundamental organic chemical and resin research, as well as process development work for the Corporation.

In the past, the fundamental research on organic chemicals carried out by Carbide and Carbon Chemicals Corporation has resulted

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THE PICTURE ABOVE SHOWS AN AIR VIEW SKETCH of the new research center of Carbide and Carbon Chemicals Corporation at South Charleston, W. Va. In the rear of the main building is the shop and power house. At the extreme back corner are cooling towers that serve the high pressure laboratories and development buildings yet to be completed in the area in the right rear of the picture.

Article Points Out Little Data Known On Bomb

"For all the forums, discussions, lectures, for the mountains of paper and the oceans of ink that have carried the atomic story, what we know now about the atomic bomb is practically nothing," says an article in a recent issue of the Science Digest. The article reflects the general security surrounding the development of atomic matter for military use such as exists in Y-12 under present security regulations.

Secrecy Is Emphasized

Science Digest further emphasizes the secrecy that has shrouded operations in atomic plants such as are operated in Oak Ridge by continuing:

"Never in the history of the human race has so much money been spent with so few persons knowing exactly what for. Three billion dollars has been spent already, current expenditures are running well over half a billion dollars a year, and the short term budget of five billion dollars will soon be reached."

In another statement that demonstrates the success of the security program of the Atomic Energy Commission and Y-12 that safeguards the secrecy on atomic matters and "know how" of operations, Science Digest points out:

No Concrete Answers Given

"A look into the pages of the Smyth Report will provide no concrete answers to questions on how the bomb works or what it looks like. A trained physicist might pick up a few clues, but nothing more."

The Y-12 security regulations are based on the premise that no information on restricted data covering methods of operations, materials or documents be made available to unauthorized persons. Every precaution is taken to guard inadvertent "leaks." Even of classified information or restricted data is closely guarded throughout the plant.

Realizing the need for release of information on development of atomic research and development along non-military lines, the Y-12 security regulations and those of the Atomic Energy Commission provide channels for release of information that been declassified for use in addresses or publication. Complete information on procedures covering such releases is readily obtainable at the Security Office, North Portal, telephone 7125.

Less Technical Talk Carried

The general observance of the security regulations covering any discussions of atomic weapons also is indicated in another reference by Science Digest that reports that the files of the Bulletin of Atomic Scientists reveal the publication is carrying less and less technical talk about topics connected in any way with the bomb.

The Science Digest article in its entirety indicates that great emphasis is being laid on all matters pertaining to atomic weapons and its findings are valuable in pointing out the importance of observance of the security program of Y-12 that is drawn for the sole purpose of protecting such information for the safety of the United States.

65s MAY REACH 79

The Metropolitan Life Insurance Co. estimates that the average American man now 65 years old will live an additional 14 years.

Contest, Exhibit Set By Camera Club

A contest among club members on color slides and the display of some national prize winning slides will feature the regular monthly meeting of the Carbide Camera Club at 7:30 o'clock tonight, Tuesday, July 12, in the club quarters in the Y-12 East Portal building. Harry Bainbridge, of Y-12, president of the club, will preside at the meeting.

Bainbridge has sent postal cards to all club members notifying them of the session. It will be the last meeting until September 13, as no meeting is scheduled in August. The September session will be marked by an open salon for both black and white prints and color slides to be displayed by the club.

The subject of the slides in the club contest tonight is flowers. A number of excellent entries had been received before the deadline last Friday.

The national prize winning slides to be shown tonight took top honors in a contest sponsored last year by the magazine Camera. The collection contains from 25 to 30 of the finest produced in the country last year.

Excellent Programs Ahead

For the balance of the year, through January, the club has arranged some excellent programs under direction of Nat Stetson, club vice president and chairman of the program committee. The program follows:

September 13—Open salon, black and white prints and color.

October 11—Print for all, black and white prints.

November 8—Fall landscapes, color slides.

December 13—Christmas cards, black and white prints.

January 10—Silhouettes, black and white prints.

In addition to these contests, other interesting topics and instructions will be given at the monthly meetings.

SWEDEN HAS TROUBLES

Recent news dispatches report that Sweden is struggling with an ambitious atomic program but has found the job none too easy for a small nation. Dr. Goesta Funke, secretary of the Swedish Atomic Energy Commission, says the main obstacles concern problems relating to the refining of uranium.

Electrical Repairmen Again Top Major League With No Absences

For the second week in succession, Dept. 2077, Electrical Equipment Repair and Maintenance, turned in a perfect attendance record in the Major League of plant departments with more than 50 employees for the week ending July 3. It was the eighth time in nine weeks for this department to finish on top to maintain its excellent record.

For the week ending July 3 seven departments, the other six in the Minor League with from 15-49 employees scheduled, reported no absences. The plant-wide absentee mark rose to an even two per cent from the 1.9 per cent posted the preceding week. In second place in the Major League was Dept. 2014, Buildings and Grounds, with .9 per cent of its personnel absent during the seven-day period ending July 3. This department rose from ninth place held the previous week. Dept. 2360, Isotope Research and Production, climbed into third place from fourth with an absentee mark of 1.16 per cent.

One Newcomer Is Listed

Only one newcomer was listed in the Minor League leaders for the week ending July 3. Three departments that posted perfect attendance records for the week ending June 26 were repeaters the next week. They were Dept. 2090, Medical; Dept. 2096, Laundry; and Dept. 2064, Research Engineering. Joining these three were Dept. 2093, Fire; Dept. 2739, Uranium Control and Computing; and Dept. 2133, Manufacturing Offices. Dept. 2093 was in second place the preceding week, Dept. 2739 was third and Dept. 2133 climbed from seventh place to join in the top listings.

Second place in the Minor League

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Second Discussion Of Series Planned By Dr. Feenberg

The second part of a discussion of nuclear shell models will be given by Dr. Eugene Feenberg, of Washington University, St. Louis, Mo., at the weekly meeting of the Oak Ridge Physics Seminar set for 4 o'clock Friday afternoon, July 15.

Scientists attending the meeting, including a number of Y-12 employees, will continue their talks on the shell model of the nuclear structure and the connection between the model and nuclear spins, quadrupole moments, selection rules and radioactive properties of nuclei.

SAFETY SCOREBOARD

Your Plant Has
Operated
SIXTEEN DAYS
Without A Lost Time
Accident
THROUGH JULY 7

'Man With The Green Thumb?'

Fulkerson's Hard Work And 'Know How' Pays Dividends In Garden; Strawberries Set Mark

Oak Ridge undoubtedly has a horde of hard-working gardeners who have produced acres and acres of succulent vegetables and fruits in plots of various sizes in the Atomic City. Of the many fine gardens in the city, however, the 3/32nd of an acre cultivated by Stanley Fulkerson, Y-12 employee in the materials laboratory of Dept. 2360, Isotope Research and Production, can be rated as top—or mighty near it.

Gardening is both a hobby and a money saver for Fulkerson, his wife and three daughters. The Y-12 man thoroughly enjoys taking care of his little plot of land at 144 Outer Drive with its 25 different varieties of agricultural products while Mrs. Fulkerson and daughters Nancy, Rea Marie and Leatha join with him in dining on frozen and canned fruits and vegetables throughout the year after the crops have been reaped.

Fulkerson has been interested in gardening for years and has engaged in the pastime—if it can be called that—in seven different states before coming to Oak Ridge.

"It is just the part of the country boy still in me," he says in explaining his hobby and the successes he has gained.

As a token of the fruitfulness of Fulkerson's work is the record he established this spring in raising

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Electrical Repairmen Again Top Attendance

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was held by Dept. 2743, Steam Plant, with .7 per cent of its employees absent. Third place went to Dept. 2107, Cafeteria and Canteens, with an absentee mark of an even one per cent. Both of these departments had perfect attendance marks for the week ending June 26.

The Y-12 plant-wide absentee record for the week ending July 3, by departments, follows:

MAJOR LEAGUE More than 50 Employees Scheduled			
Dept.	Absent	Percentage	Standing
2077	0.0	7-3-49	6-26-49
2014	0.9	1	9
2360	1.16	2	4
2015	1.20	3	7
2091	1.3	4	3
2320	1.5	5	2
2142	1.9	6	5
2616	2.2	7	4
2003	3.5	8	10
2300	3.80	9	8
2282	3.84	10	6
2283	4.3	11	11

Group absentee percentage was 2.1 per cent, .1 per cent lower than the preceding week.

MINOR LEAGUE 15-49 Employees Scheduled			
Dept.	Absent	Percentage	Standing
2090	0.0	7-3-49	6-26-49
2096	0.0	1	1
2064	0.0	1	1
2093	0.0	1	1
2739	0.0	1	2
2136	0.0	1	3
2743	0.7	2	1
2107	1.0	3	1
2099	1.1	4	1
2109	1.2	5	-
2200	2.1	6	1
2619	2.4	7	9
2005	2.7	8	6
2001	3.5	9	5
2008	5.0	10	1
2060	5.3	11	4
2002	7.4	12	8

Group absentee percentage was two per cent, .7 per cent higher than the preceding week.

The plant average for the week ending July 3 was 2.0 per cent, .1 per cent higher than the preceding week.



HENDERSON-JONES

Of interest to many Y-12 friends of the bride-elect is the announcement of the approaching marriage on July 23 of Margaret Henderson, former Y-12 employee, and Robert M. Jones, of the Oak Ridge National Laboratory. The wedding will be performed at Athens, Tenn., former home of the bride-to-be.

The bride-elect is the daughter of Mr. and Mrs. P. H. Keenev, formerly of Athens and now of Mobile, Ala. She is now employed by Fairchild Engine and Airplane Corp., NEPA Division, in the company library. Jones is a mechanical engineer in the technical division of ORNL.

The couple plans to live in Oak Ridge.

HOW ABOUT THOSE VACATION PICTURES?

Here we are in the middle of the vacation season and The Y-12 Bulletin would like to publish a photographic record of pleasant and interesting moments spent by you folks during your trip—if any. If you just stayed at home—perhaps you have a back yard or fishing picture. Let us have a print and if it capable of reproduction at all it will be printed.



RAY LEDFORD, CAPTAIN IN THE Y-12 GUARD DEPARTMENT, and members of his family enjoy their varied and large collection of African violets. In the picture at the left Captain Ledford is holding little daughter, Ragena Kay, while Mrs. Ledford and his other daughter, Omega Rhea, are at left. On the table is an Ionantha variety in the center, surrounded by Pink Beauty, Double

Ledfords Enjoy African Violets Of 53 Varieties

Of the many Y-12 families who enjoy flowers—the Ray Ledfords are no exception. He is a captain in the Y-12 Guard Department and lives at 102 Pasteur Lane. Mrs. Ledford and the two little daughters, Omega Rhea and Ragena Kay, admittedly do most of the tending of the Ledford flowers—which are featured by a collection of 53 varieties of African violets.

The pots containing these unique plants that live on air and which do not require water—in fact water will kill the plants if applied directly to the dirt in which they are planted—are attractively arranged throughout the house. In addition to the African violets, Captain Ledford earlier in the spring was particularly proud of an exceptionally beautiful night blooming cereus that he cultivated and coaxed to maturity.

Mrs. Ledford had been making a hobby of collecting and raising African violets for only two years and although her collection is not claimed to be the largest in Oak Ridge she has some widely varied specimens of the plants.

Included in her collection are sky blue, blue leatherneck, orchid beauty, blue eyes, ruffles, pink leatherneck, amazon pink, blushing maiden, gypsy lace, Freida, topaz, amethyst, blue amazon girl, lilac lady, gypsy Ann, viking, lavender lady, blue boy, double duchess, pink girl, gorgeous, pink beauty, merckies, gypsy actress, gypsy princess, dainty maid, gypsy Lula, gypsy queen, blue boy supreme, duPont lavender pink, Ionantha, redlands, red head, red girl, Neptune, Mary Wac, pink lady, bicolor, mentor boy, blue velvet, amazon red, blue girl, white lady, commander, Trilby, duPont blue, Jane's second prize, admiral, crinkles, purple beauty, blue 32, kewensis and sapphire.

Hospital List

The following Y-12 employees were patients at the Oak Ridge Hospital recently: Phyllis M. Brown, Dept. 2320; Martha M. Wright, Dept. 2282; William B. Cottrell, Dept. 2330; Frederick C. Uffelman, Dept. 2739.

CANCER RESEARCH SET

The New York Herald-Tribune has announced the appointment of two outstanding scientists to set up a program of cancer research with radioactive materials. They are Dr. Donald D. VanSlyke, of the Rockefeller Institute for Medical Research; and Dr. Lee E. Farr, director of research for the Alfred I. duPont Institute. They will work at the Brookhaven National Laboratory of the Atomic Energy Commission.



Mae Hale, Dept. 2320, Electromagnetic Research Laboratory, and her husband made a 7,722-mile trip during a recent vacation. They first traveled to Texas to visit with relatives, from there to Grand Canyon in Arizona and Boulder Dam in Colorado to Las Vegas, Nev. In California they visited in Los Angeles, Yosemite National Park, San Francisco and Redwood Park. From California they traveled to Oregon where they visited with relatives in Portland and Salem. On their return the Hales traveled through Boise City, Idaho; Salt Lake City, Utah; Denver, Col.; Kansas City, Kans.; and St. Louis, Mo.

Dept. 2200, Superintendents, extends get well wishes to June Messer and Reatha Luce who are on the sick list. . . R. G. Orrison and his wife made a week-end visit with Mrs. Orrison's parents in Scottsville, Ky. . . Marie Greenway visited with her parents in Spartanburg, S. C.

Returned vacationers in Dept. 2015, Field Maintenance, are C. J. Mitchell, W. C. Laughlin, B. A. Hicks, J. S. McGhee and H. J. Tate. . . L. P. Parrett spent his vacation in Nashville and points of interest in Kentucky. . . W. J. Wanmaker is back on the job after vacationing in Nashville. . . During his vacation W. W. Watson traveled to St. Augustine, Fla.

J. A. McLain, Dept. 2005, Maintenance Utilities, is vacationing in Norfolk, Va. . . A. H. Shubert and E. F. Wallace were on the vacation list last week. . . Get well wishes are extended to R. D. Freels, who was in an automobile accident recently and is recovering at his home in Sunbright, Tenn.

Virginia Smith, Dept. 2090, Medical, made a week-end visit with her parents in Dante, Va. . . Louise Worthington was on the vacation list last week. . . Penny Keene, Dept. 2090 and her husband, Oliver, Dept. 2133, Manufacturing Offices, made a week-end trip to Tuscaloosa, Ala. . . Blanche Gibbs traveled to Bryson, N. C. over a recent week end.

Madeline Packett, Dept. 2107, Cafeteria and Canteens, spent a restful vacation at her home in Lake City, Tenn. . . Fannie Daniels traveled to Detroit, Mich., during her vacation. . . Irene McCroskey spent last week resting at her home in Sweetwater, Tenn.

Betty Jo Butler, Dept. 2109, Employee Relations, and her mother, Meta, Dept. 2115, Wage Standards, made a week-end trip to their home town—Camden, Tenn.

Clarence Johnson, Dept. 2041, Safety, and his wife with some visiting relatives from Starkville, Miss., motored to Fontana Dam, N. C., over the Independence Day holiday week end.

Dept. 2003, Maintenance Shops, welcomes Jack Case back on the job after an extended illness.

Employees on the vacation list in



Y-12 Photos By Vince Moore
Duchess, Redlands, Blue Boy Supreme, Georgiana, Pink Lady and Blue Boy. On the top shelf, from left, are Viking, Merckies and Ionantha; second shelf, Frieda and Red Girl; third shelf, Neptune and Pink Girl and, bottom shelf, Lavender Lady and Amazon Red. The right-hand picture shows the attractive display of the violets in a window of the Ledford home.

Historical Tea Leaves Are Kept By Bostonians

The Bostonian Society certainly believes in the preservation of historical items, no matter how minor.

The society has on display in a small flask in the Old State House, the first public building in Boston, a few of the tea leaves that fell into a leather boot of one of the "Indians" that took part in the Boston Tea Party 175 years ago.

They came from the boot of Maj. Thomas Melville, grandfather of the author, Herman Melville, and one of the raiders who threw some 350 chests of tea into the Boston harbor as a protest against tax measures of the British.

Edward Hoynoski, Ex-Y-12 Employee; Succumbs In Ohio

Edward Hoynoski, 30, former Y-12 employee, died at his home in Dayton, Ohio, Sunday, July 3, according to word received by friends in Oak Ridge last week. He had been ill for only three weeks. He was a native of Amsterdam, Ohio.

Survivors include his widow, the former Miss Bennie Brazzel, also a former Y-12 employee, a three-months-old baby; and his mother, Mrs. Enoch Hoynoski, of Cleveland, Ohio.

Hoynoski came to Y-12 November 5, 1943 and remained until 1946, when he went to Dayton and was employed by the Monsanto Chemical Co. at Miamisburg at the time of his death. He was a graduate of Centenary College, Shreveport, La., where he received a degree in chemistry.

While in Y-12 he won honors as a baseball player, performing with the Y-12 varsity team in the Oak Ridge City League in 1944, 1945 and 1946. He was a heavy-hitting outfielder and in collegiate days he had been given offers by the St. Louis Cardinals and Boston Red Sox to turn professional.



Only one birth was reported at the Oak Ridge Hospital to a Y-12 family recently. Parents were Mr. and Mrs. Thomas Wilson, a daughter, July 1.

"Nature seems determined to make us work."

"Yep, the less hair we have to comb, the more face we have to wash."

(Continued on Page 4)

SPORTS NEWS

Photo-Finish Staged In League With Three Teams Under Blanket

That photo-finish race in the Y-12 plant softball league had not been determined at press time of The Y-12 Bulletin last Friday as games scheduled for that night and perhaps even some more clashes were needed to settle the muddled situation. Three teams, the Rippers, All Americans and Bums were bunched under a blanket and had a chance for the title last Friday in the hottest plant league race in the history of Y-12 recreation activities.

As of that date the Rippers had a half-game lead over the All Americans with the Bums one game behind the All Americans and one and one-half games behind the leading Rippers. The Rippers had one game to play and a protested victory that might have to be played off. The All Americans and Bums also had one game scheduled. Second Half Under Way

Regardless of the outcome of the first half of the season play, the Recreation Office planned to start the second half of the season Monday night with three games. If additional playoff games are required for the first half of the season championship they will be scheduled at a later date.

The second half schedule of play follows in full:

Wednesday, July 13

5:45 p.m., Bums vs Rippers. 7:15 p.m., All Stars vs Bldg. 9212. 8:45 p.m., Isotopes vs All Americans.

Friday, July 15

7 p.m., Y-12 women's squad game. 8:30 p.m., Bldg. 9212 vs Hit Balls.

Monday, July 18

5:45 p.m., Y-12 women's squad game. 7:15 p.m., All Americans vs All Stars. 8:45 p.m., Isotopes vs Rippers.

Wednesday, July 20

5:45 p.m., All Americans vs Bldg. 9212. 7:15 p.m., All Stars vs Hit Balls. 8:45 p.m., Isotopes vs Bums.

Friday, July 22

7 p.m., Bldg. 9212 vs Rippers. 8:30 p.m., Hit Balls vs Bums.

Monday, July 25

5:45 p.m., Hit Balls vs Isotopes. 7:15 p.m., Bums vs Bldg. 9212. 8:45 p.m., Rippers vs All Stars.

Wednesday, July 27

5:45 p.m., Bldg. 9212 vs Isotopes. 7:15 p.m., All Americans vs Hit Balls. 8:45 p.m., All Stars vs Bums.

Friday, July 29

5:45 p.m., Y-12 women's squad game. 7:15 p.m., Rippers vs All Americans. 8:45 p.m., Open for postponed or rained out games.

Only two scheduled games were played in the plant league last week because of the July 4 holiday. The Rippers managed to stay on top of the loop by squeaking out a 14 to 13 victory over Bldg. 9212 in an extra-round eight-inning game. Bldg. 9212 got away to a running start and held a 9 to 4 lead at the end of four innings. In the fifth session the Rippers roared to seven tallies and led by two counters. Bldg. 9212 came back with four more runs in the sixth but the Rippers again tied it up in the seventh and went ahead to push the deciding run across in the eighth. The winners used three hurlers with Noe, going in to pitch in the fourth, getting credit for the win.

Hit Balls Score Victory

In the other game of the week the Hit Balls scored an 8 to 3 win over the All Stars. The Bums, in an exhibition game, trounced a K-25 plant league team, 9 to 6.

Line scores of these games and standing of the league as of last Thursday follows:

Team	R	H	E
Bldg. 9212	0	2	4
Rippers	1	0	3
Batteries: Bldg. 9212, Barker and Wright. Rippers, Green, Martin (3) and Noe (4), Lowery.			

Team	R	H	E
All Stars	0	0	0
Hit Balls	0	3	1
Batteries: All Stars, Tison and Twitchell. Hit Balls, Sise and Sherrod.			

Team	R	H	E
K-25 Plant	0	0	0
Bums	1	0	4
Batteries: K-25, Gordon and Henry. Bums, Darby, Walton (5) and Hale.			

Team	W	L	Team	W	L
Rippers	9	2	Bldg. 9212	7	6
All Americans	9	3	Hit Balls	4	9
Bums	8	4	All Stars	2	10
Isotopes	7	5			

Consideration for others delays traffic but permits a few people each day to live out their natural lives.

Sise Shuts Out Moose For Y-12 10-0 Victory

Ed Sise, star softball hurler on the Y-12 varsity team in the Oak Ridge Recreation League, flung a four-hitter against the Loyal Order of Moose lodge team July 1 as his teammates banged out a 10 to 0 victory. The Moose herd was helpless before the Sise slants as the Y-12ers coasted to their triumph in a postponed game to wind up the first half of the season.

The second set of games in the second round are set for Friday night, June 15, when Y-12 again will be pitted against the Moose. This will be the opening tilt of the night starting at 6 p.m. The National Guard and T. and C. Lunchcooneers will play at 7:30 p.m. with the Wildcats' Den meeting the Eagles in the nightcap scheduled for 9 p.m.

Against the Moose July 1 the Y-12 cause was aided by five errors on the part of the losers. The victors played excellent ball in the field with but one bobble as the Moosemen seldom threatened.

In the first half of the season play Y-12 finished with five games won and no defeats.

Line score of the July 1 game follows:

Team	R	H	E
Y-12	1	0	2
Moose	0	0	0
Batteries: Y-12, Sise and Hale. Moose, Nichols and Campbell.			

Common House Fly 'Public Enemy No. 1'

The common house fly is the world's Public Enemy No. 1 and is "wanted" for a multitude of crimes against the health of the public, it is pointed out by the Oak Ridge Department of Public Health.

The buzzing little pest can not only prove disturbing to summer time sleepers but is indicted by the health authorities for the crime of contaminating food with bacteria that causes a greater variety of contagious and infectious diseases and causing the illness and death or more persons than any other insect known.

An enlarged view of the common house fly shows an obnoxious looking creature. It is grey in color with four stripes on its back—if you get close enough to them to closely inspect the insect. Its body, feet and legs are covered with hair.

The fly frequents filthy places to gorge on spittle, vomit and other similar excrement that can be teeming with germs. The germs are collected on the hair of the feet of the fly and in its intestines. Instructions are given on how to fight this "criminal" of the bug world.

1. Destroy all its breeding and feeding places.
2. Be sure all doors are self-closing and screened.
3. Screen all ventilating windows, transoms, doors and similar openings with fine mesh wire screening that is tight fitting and free of holes.
4. Use a powerful exhaust fan to expel odors that attract flies.
5. Promptly dispose of all garbage, rubbish and litter.
6. Leave no food uncovered or out of fly proof containers.
7. Finally—swat that fly—or kill him with sprays or powders.



Y-12 Photos By Vince Moore

THE ALL STARS TEAM OF THE Y-12 PLANT SOFTBALL League may not have won as many games as some of their opponents but they are in there pitching on every trip to the diamond. Sitting from left are Al Palco, George Marron, Paul Petretsky, H. V. Saine, Fletcher Daley, Joe Tison and Rudy Pletz. Standing are Bill Carruthers, Louis Twitchell, Bill Davis, Bob Adams, Don Kuhn, John Schmitt and Roy Williams.

Cards Trounce VFW By 14 to 9; Blast Three Homers, Nine Errors

Some prodigious pounding of the pellet for a total of 16 safe base hits, including three home runs, enabled the Y-12 Cardinals to slap a 14 to 9 defeat onto the Veterans of Foreign Wars at Oakwood Park on Friday night, July 1. In other words, the Cards exploded their fireworks just before the long Fourth of July holiday.

The Cardinals' triumph was gained despite nine bobbles in the field that kept Y-12 hurlers Addison and Prater on the uneasy seat for most of the game. However, with ducks on the pond, the Card curvers bore down and prevented too much damage. Prater came into the game in the seventh with Y-12 trailing, 9 to 4, and quieted the Vets while the Cards banged out 10 runs in the next two rounds to win.

The Y-12 circuit clouts were conked by Johnson, with a pair, and Addison, with one. Addison, who retired to left field in the seventh, banged out three for four during the tilt and Kappelmann and Guttery each got three for five.

Cards Play K-25 Tonight

The Cardinals will play their first game of the second half of the season at 8:15 o'clock tonight, Tuesday, July 12, under the lights at Oakwood Park No. 1 against the K-25 aggregation, their old rivals from the banks of the Clinch River. Because of the necessity of playing several postponed encounters to determine the winner of the first half of the season play in the Oak Ridge Baseball League, no further progress had been made in working out a schedule for the second half. However, Y-12 fans wishing to know when the Cards play next may obtain the information from the Recreation Office, North Portal, telephone 7-8252.

The line score of the Cardinal victory over the FWF clan follows:

Team	R	H	E
VFW	0	3	0
Y-12	2	10	9
Batteries: VFW, Cater, Mull (7) and Thomas. Y-12, Addison, Prater (7) and Dodson.			

Admission Free To Cards, Sweetwater Tilt Saturday

The Y-12 Cardinals will entertain their first out-of-town opponent at Oakwood Park, No. 1, Saturday, July 16, when they will meet the strong Sweetwater amateur club. Game time is set for 8:15 o'clock and admission is free. All Y-12 fans are urged to turn out and support their team.

On an earlier visit to Sweetwater on Sunday, July 3, the Cardinals were trimmed by the score of 9 to 1. As a result, Manager Bill Burns' outfit is looking for revenge and promises to turn in one of their better games of the season.

Right Food Means Improved Health

Right foods can mean better health, says the Metropolitan Life Insurance Co. However, appetites and tastes are not always the best guides to a good diet. Neither is cost, for some families that spend a lot on food are not as well-nourished as those who spend less but choose more wisely and enjoy a well-balanced diet.

39 Golfers Of Y-12 Opened Plant Tourney

A total of 39 Y-12 golfers were scheduled to tee off last Saturday in the first round of the annual plant-wide golf tournament. The second round was slated to have been played Sunday and the final championship matches in each of the five flights may be played any day this week and completed before Saturday.

Positions Based On Averages

Assignment to various flights is based on averages posted during the first half of play in the three Y-12 golf leagues and on qualifying scores turned in by non-league players.

Here are the pairings for first round play in the various flights.

First Flight

Lavers vs Koontz. Ludwig vs Reynolds. Bowles vs Vincens. Sherrod vs Leaders.

Second Flight

Olson vs Cain. Barker vs Orrison. Ratjen vs Wanemaker. Caldwell vs bye.

Third Flight

Holzknicht vs Mitchell. Tiller. Nessle vs Keese. Hubert vs Tibbatts.

Fourth Flight

Brown vs Henderson. Harris vs Foster. Adkins vs Herndon. Stetson vs Grimes.

Fifth Flight

White vs Hooker. Doyle vs Crews. Bernander vs Cotton. Koons vs Matlock.

Prizes To Be Given

Prizes are to be awarded the winning golfer in each flight and also for the low 18-hole score turned in during the event. All matches will be over the 18-hole route.

Friend: "Let me congratulate you, old man. I'm sure you'll always look on this day as the happiest of your life."
Bridegroom: "But it's tomorrow I'm being married!"
Friend: "Yes, I know."



Women Netters Of Y-12 Break Even With ORNL

The Y-12 women's varsity tennis team found the going rather tough last Tuesday night against the feminine racquetters of the Oak Ridge National Laboratory as the two teams split six matches evenly. The Y-12 girls had won the first half of the season honors in the Oak Ridge City League by a wide majority and the clash last week was the opening play in the second half of the season.

Helen Burkhalter turned in a 6-3, 6-4 victory for Y-12 over Byard and Elizabeth Patrick walloped Webster, 6-3. 6-1. Mary Freestone took the first set from Silverman, 8-6, but then tired and the ORNL netter went on to take the next two, 6-2, 6-1. Mozelle Rankin lost to Lane, 5-7, 1-6.

In doubles Ann Hart and Virginia Spivey teamed up for Y-12 to defeat Huddleston and Kaslauskis in a three-set scrap, 5-7, 6-4, 6-1. Lovelle Thompson and Desma Hutcheson found Flynn and Gaither, of ORNL, too tough and lost in a close engagement, 5-7, 4-6.

The Y-12 lassies will endeavor to regain their winning form at 5:30 o'clock Thursday afternoon when they tackle the Independents on the Townsite courts.

Mae Hale Put On Net Ladder

The name of Mae Hale was added at the foot of the Y-12 women's tennis ladder last week and Joan Gilliam and Phyllis Brown dropped out of competition. Joan is on vacation and Phyllis is recovering from injuries received in an automobile accident.

The newcomer will play her first matches this week, taking on either Lovelle Thompson or Desma Hutcheson. The revised ladder standing is Mozelle Rankin, Mary Freestone, Elizabeth Patrick, Helen Burkhalter, Ann Hart, Virginia Spivey, Lovelle Thompson, Desma Hutcheson and Mae Hale.

URANIUM SOURCES CITED

The Salt Lake City Tribune recently declared that as long as Canada and Belgium are members of the Atlantic Pact that the United States will not want for uranium. The paper also said Portugal and England can contribute small amounts.

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Carbide Puts Modern And Versatile Research Center In Operation At South Charleston, W. Va., To Continue And Expand Basic Work

(Continued From Page 1)
in the commercial production of many new materials upon which whole industries have been founded. For example, the series of vinyl resins developed gave impetus to a new plastics industry, by opening huge new markets for flexible plastics to be used in fabrics, coatings, molded objects, electrical insulation and many other fields.

Planning for the research facilities was begun before the war. These plans crystallized in 1945 when the preliminary designs were prepared. Subsequent studies of needs, combined with the benefit of experience from other modern research facilities indicated that many improvements could be made over the original plans. The new main building is now considered to

be of the finest possible design.

The laboratory building proper is designed as a three-story T-shaped structure of steel and brick, 325 feet long by 96 feet deep. It contains 69 individual laboratories and 48 offices, a large-scale laboratory, a large library, an auditorium seating 125, and necessary storage and service rooms. Now also in operation are a 40,000 pound-per-hour steam plant, a maintenance and equipment fabricating shop, and a cooling tower, all connected by subways carrying utility lines.

Trim In Stainless Steel, Bakelite

The front panelling of the main building and lobby showcases are of stainless steel. Interior panelling in the lobby is of "Bakelite" phenolic resin-bonded plywood as are all office window sills. Floor tile is all of "Vinylite" plastic and upholstery of the lobby, conference room, auditorium and rest room furniture is of "Vinylite" flexible plastics, of the type originally developed by the people of this laboratory. All electric wire insulation is of vinyl materials or polyethylene.

Several aspects of the laboratory are of unusual interest. The individual laboratory, the production center for research, was selected as the basic starting point for development of the functional plan. Individual laboratories were designed as repetitive units in 13-foot wide sections. This establishes adaptability with a choice of room width of 13, 26, or 39 feet, the maximum required. The depth of laboratory rooms was set at 24 feet to accommodate multiples of standard three-foot sections of laboratory furniture.

The standard 13 by 24 foot room accommodates two or three workers and may be equipped with any combination of laboratory furniture.

Economies Are Accomplished

An interesting feature of the structure is the reduction in the number of rows of columns, by the use of only one row through the middle. This contribution to easier changes in the arrangement of partitions has led to substantial economies in the building despite skyrocketing costs during the time when most of the construction was in progress.

Elaborate precautions have been taken to prevent contamination of office areas, and cross-contamination between laboratories. This is accomplished by providing each laboratory with an individual exhaust fan of sufficient capacity to remove the conditioned air supplied to the room plus that supplied to the office areas.

The physical testing equipment includes, in addition to the usual equipment, an electronmicroscope, a mass spectrometer, a vacuum coating unit for electronmicrographs, an X-Ray diffraction unit, a microdensitometer, and ultra-violet and infra-red spectrometers.

Many Safety Appliances Installed

Employee safety has received careful consideration. The air conditioning system is designed to prevent contamination of the building with toxic or flammable vapors. In addition, the basement and pipe shafts are continuously purged by exhaust fans located in the penthouse. The doors from the laboratories to the 100-yard long corridors swing outward. At the opposite end of each laboratory is an escape door to the adjoining room. The stairwells and exit doors are so located that it is possible to leave by at least two routes from any point in the building.

To insure personnel safety, the laboratory center has a fully equipped medical dispensary with a nurse in attendance, an eye-washing fountain in each laboratory, and safety showers, blankets, stretchers and gas masks in the corridors. Fire protection equipment includes a "rate of rise" detection system that actuates a central station alarm in the telephone switchboard room as well as alarm bells in other parts of the building; two small carbon dioxide extinguishers in each laboratory, and numerous larger ones as well as fire hoses with fog nozzles in the corridors.

'Green Thumb' Of Fulkerson Pays Dividends

(Continued From Page 1)

strawberries. He carefully measured his little space for the berries and reported it to be 1/35th of an acre in size.

On this land Fulkerson picked the equivalent of 10 crates of strawberries. That would be an average of 350 crates to an acre and the mark tied the productivity record established by a commercial strawberry raiser in West Tennessee who grew the berries on a large scale. Fulkerson sold quite a few berries from his plot after the family had canned all they needed for the coming year until the next crop comes in. The Fulkerson berries went by the box instead of crate but the rate of production on the tiny Oak Ridge plot is considered remarkable by all agricultural authorities.

Speaking of the 25 different varieties of products grown, Fulkerson pointed out that one well-known farm magazine declares that an ideal garden for a family of five persons should have at least 21 fruits and vegetables planted. This will enable the family to have fresh, frozen or canned products available the year around after the regular growing season.

Has Some Rare Products

In addition to the usual staples in the garden such as tomatoes, corn, beans and squash, Fulkerson has some rather rare varieties for a home gardener. One of them is the salsify, also known as the oyster plant. He also has some of the dill herbs used in pickling and has a small amount of horseradish.

Fulkerson spent his early days on a farm near Fayetteville, Ark., and came to work in Y-12 back in August, 1944. He first moved into a house at 114 Orchard Circle where he first began his gardening activities.

Daughter Relates Success

Let's let Miss Leatha Fulkerson tell of the progress made.

"When we first moved in our back yard was just a big hill with four big stumps and a gully. Daddy had us children, mother and a lot of neighborhood kids carrying boulders to be used in terracing a garden. Meanwhile he cut and burned the stumps—but he still found time to carry as many rocks as anyone else.

"After making a success of the garden there we moved to our present home in the winter of 1947 and Dad immediately began his new garden. The first thing he planted was a picket fence that had 947 pickets in it. Rea Marie and I know—for we painted every picket, top, sides and rails, not once but twice.

Built Own Greenhouse

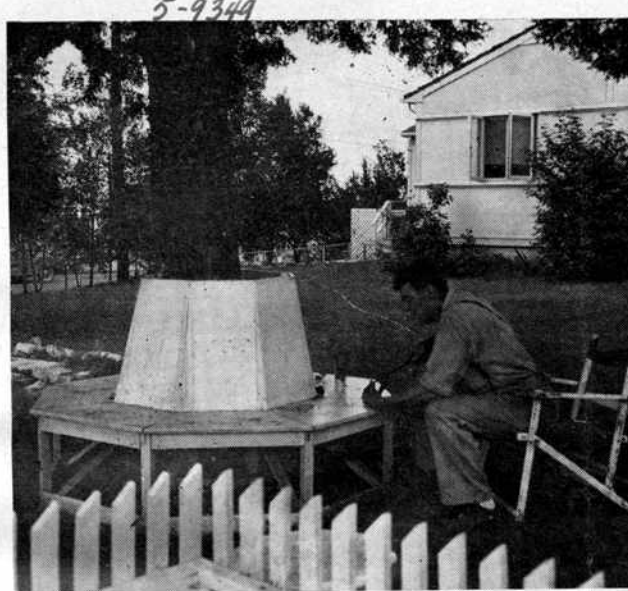
"Dad has built his own hothouse where he raises strawberry and tomato plants from seed and also has found time to do some landscaping with flowers and a terrace to prevent washing of the soil."

So it seems that Fulkerson really has that "green thumb," the trait attributed to all farmers and gardeners who have unusual success with their efforts. However, his folks and neighbors declare a lot of hard work, common sense and knowledge of gardening is just as much responsible.

There isn't much to see in a small town but what you hear more than makes up for it.

"Is that girl's dress torn or am I seeing things?"

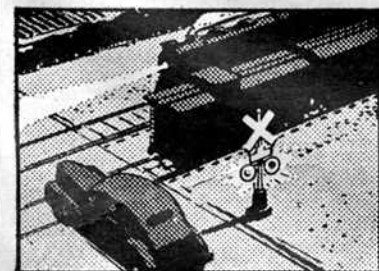
"Both."



STANLEY FULKERSON, DEPT. 2360, HAS ONE OF THE finest gardens in all of Oak Ridge. At left above Fulkerson is tinkering with an eight-sided tree seat around a pine tree that provides plenty of shade in his yard at 144 Outer Drive. At right above he is being assisted in gathering squash by a daughter, Nancy, five, as another daughter, Rea Marie, 13, looks on. The lower picture shows a part of the strawberry bed in foreground and tomatoes and beans in the background.

Y-12 Photos By Vince Moore

Racing Trains To Crossings Bad Business



No better advice can be given a motorist than to pay strict attention to the "Stop, Look and Listen" warning when approaching railroad grade crossings.

Racing to railroad crossings by drivers who just want to see if they can beat the train to the intersection or are in a hurry to go nowhere in particular accounts for 16 deaths or injuries, mostly the former, every day. Many motorists do not realize that a train running at from 40 to 70 miles per hour cannot stop at less than several hundred yards even if an engineer does see an approaching motor vehicle in which the driver has designs to beat the train to the crossing.

Should Stop At Crossing

Even where railroads have in-

stalled flashing red light signals at heavily-traveled crossings, all motorists should exercise extreme care in crossing the tracks. Where a crossing is blind it is always advisable to come to a complete stop and look both ways along the railroad tracks to see if a train is approaching from either direction.

Trains Don't Chase Cars

This is particularly true where there are double tracks or more at a crossing. Many times a driver has awaited the passing of one train only to drive in the path of another traveling in the opposite direction on an adjacent track.

In reviewing the cause of grade crossing collisions between motor vehicles and trains it always can be remembered—that a train seldom has chased an automobile up a road to crush it into a shapeless mass of metal and probably kill its driver.

Chest Examinations Are Important

Tuberculosis, especially in its early stages, often has no symptoms, it is reported by the Metropolitan Life Insurance Co. Discovery of the disease then depends on a thorough medical examination, aided by an X-Ray picture of the chest. Such examinations are particularly important for adolescents and young adults, among workers exposed to silica dust and other special groups, which have a high tuberculosis death rate.



(Continued From Page 2)

209 Oak Road, Norris, Tenn. . . R. L. and Alice Jamison, accompanied by Forest Seelys, spent a recent week end at Fontana Dam.

Otis Rackley and Bob McAlister, Dept. 2091, Guard, made a week-end trip to Chattanooga and while there they attended a Birmingham and Chattanooga double header baseball game.

T. S. Curtis, Dept. 2143, Receiving and Shipping, was on the vacation list last week. . . S. A. Copeland made a trip to Illinois to visit with his daughter. . . J. W. Garland, Dept. 2143, and Joe Evans, Dept. 2144, Tool, and Mr. Garland's son, Dan, went on a trout fishing trip to the Smokies recently and reported a total catch of two rainbow trout. . . J. H. Talley is spending his vacation beautifying the Talley's farm house near Russellville, Tenn.

Joe Walton, Dept. 2360, Isotope Research and Production, spent a recent week end at the Ocean Forest Hotel in Myrtle Beach, N.C.

Edna Cate, Dept. 2616, Product Chemical, sang in Madame Briley's Spring Ensemble last Tuesday night at the First Baptist Church in Knoxville. . . Mr. and Mrs. I. M. Henson and their son, J. B., of Pine Knot, Ky., visited Geneva Rickard over a recent week end. . . C. C. Bolling and his family spent a recent week end sightseeing in Chattanooga. . . Ted Higgins and his wife were in Daytona Beach, Fla., during their vacation last week. . . W. W. Welchel is spending his vacation at his home in Knoxville. It is reported he is spending a great part of his time watching progress of his new home built in Knoxville. . . Naomi Sexton spent a recent week end visiting with friends in Frankfort, Ind.

C. F. Holloway, Dept. 2060, Plant Engineering, made a week-end trip to Jackson, Tenn. . . M. C. Becker and his wife visited his family in Louisville, Ky. . . Evelyn Brackney visited with home folks in Elizabethton, Tenn., recently. . . J. C. Little and his family traveled to Lincolnton, N. C. to visit with his father. . . C. H. Roddy and his family made a jaunt to Ducktown, Tenn., to visit with relatives. . . E. C. Sienknecht spent his vacation at his home in Knoxville.

There will be nearly 1,000 home fires in the United States during the next 24 hours, and most of them will be caused by carelessness, according to the National Board of Fire Underwriters.